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**FROM: Winston Hsu, PATENT AGENT, REG. NO. : 41,526**

**SERIAL NO.: 10/604,586**

**ATTORNEY DOCKET NO.: CHEP0025USA**

**SUBJECT: INFORMATION DISCLOSURE STATEMENT**

**TOTAL PAGES: 12 PAGES (INCLUDING COVER PAGE)**

**Winston Hsu 2004/03/12**

**CHEP0025USA0\_D1\_1**

PTO/SB/97 (08-00)  
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APPLICATION NUMBER: 10/604,586

PAPERS INCLUDED:

(1) Transmittal Form	1 PAGE
(2) Fee Transmittal	1 PAGE
(3) Information Disclosure Statement	8 PAGES

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<b>TRANSMITTAL FORM</b>  (to be used for all correspondence after initial filing)	Application Number	10/604,588	
	Filing Date	07/31/2003	
	First Named Inventor	Hsu-Chu CHien	
	Art Unit	2861	
	Examiner Name	N/A	
Total Number of Pages in This Submission	10	Attorney Docket Number	CHEP0025USA

ENCLOSURES (Check all that apply)		
<input checked="" type="checkbox"/> Fee Transmittal Form	<input type="checkbox"/> Drawing(s)	<input type="checkbox"/> After Allowance communication to Technology Center (TC)
<input type="checkbox"/> Fee Attached	<input type="checkbox"/> Licensing-related Papers	<input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences
<input type="checkbox"/> Amendment/Reply	<input type="checkbox"/> Petition	<input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief)
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<input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53		

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT	
Firm or Individual name	Winston Hsu, Reg. No.: 41,526
Signature	<i>Winston Hsu</i>
Date	3/12/2004

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PTO/SB/17 (10-03)

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# FEE TRANSMITTAL for FY 2004

Effective 10/01/2003. Patent fees are subject to annual revision.

☒ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$ ) 0.00

## Complete if Known

Application Number	10/604,586
Filing Date	07/31/2003
First Named Inventor	Hsu-Chu CHien
Examiner Name	N/A
Art Unit	2861
Attorney Docket No.	CHEP0025USA

## METHOD OF PAYMENT (check all that apply)

☐ Check ☐ Credit card ☐ Money Order ☐ Other ☐ None  
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Deposit Account Name: North America International Patent Office

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## FEE CALCULATION

## 1. BASIC FILING FEE

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid
1001 770	2001 385	Utility filing fee	
1002 340	2002 170	Design filing fee	
1003 530	2003 265	Plant filing fee	
1004 770	2004 385	Reissue filing fee	
1005 160	2005 80	Provisional filing fee	

SUBTOTAL (1) (\$ ) 0.00

## 2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

Total Claims	Extra Claims	Fee from below	Fee Paid
Independent Claims	-20** =	X	
Multiple Dependent	-3** =	X	

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description
1202 18	2202 9	Claims in excess of 20
1201 86	2201 43	Independent claims in excess of 3
1203 290	2203 145	Multiple dependent claim, if not paid
1204 86	2204 43	** Reissue independent claims over original patent
1205 18	2205 9	** Reissue claims in excess of 20 and over original patent

SUBTOTAL (2) (\$ ) 0.00

\*\*or number previously paid, if greater; For Reissues, see above

## FEE CALCULATION (continued)

## 3. ADDITIONAL FEES

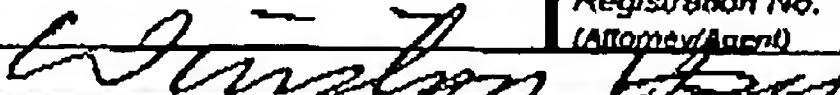
Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid
1051 130	2051 65	Surcharge - late filing fee or oath	
1052 50	2052 25	Surcharge - late provisional filing fee or cover sheet	
1053 130	1053 130	Non-English specification	
1812 2,520	1812 2,520	For filing a request for ex parte reexamination	
1804 920*	1804 920*	Requesting publication of SIR prior to Examiner action	
1805 1,840*	1805 1,840*	Requesting publication of SIR after Examiner action	
1251 110	2251 55	Extension for reply within first month	
1252 420	2252 210	Extension for reply within second month	
1253 950	2253 475	Extension for reply within third month	
1254 1,480	2254 740	Extension for reply within fourth month	
1255 2,010	2255 1,005	Extension for reply within fifth month	
1401 330	2401 165	Notice of Appeal	
1402 330	2402 165	Filing a brief in support of an appeal	
1403 280	2403 145	Request for oral hearing	
1451 1,510	1451 1,510	Petition to institute a public use proceeding	
1452 110	2452 55	Petition to revive - unavoidable	
1453 1,330	2453 665	Petition to revive - unintentional	
1501 1,330	2501 665	Utility issue fee (or reissue)	
1502 480	2502 240	Design issue fee	
1503 640	2503 320	Plant issue fee	
1460 130	1460 130	Petitions to the Commissioner	
1807 50	1807 50	Processing fee under 37 CFR 1.17(q)	
1806 180	1806 180	Submission of Information Disclosure Stmt	
8021 40	8021 40	Recording each patent assignment per property (times number of properties)	
1809 770	2809 385	Filing a submission after final rejection (37 CFR 1.129(a))	
1810 770	2810 385	For each additional invention to be examined (37 CFR 1.129(b))	
1801 770	2801 385	Request for Continued Examination (RCE)	
1802 900	1802 900	Request for expedited examination of a design application	

Other fee (specify)

\*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$ ) 0.00

## SUBMITTED BY

Name (Print/Type)	Winston Hsu	Registration No. (Attorney/Agent)	41,526	Telephone	886289237350
Signature		Date	3/12/2004		

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**PATENT**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

5 Applicants: Hsu-Chu Chien, Chih-Cheng Chang  
Filing Date: 07/31/2003 Art Unit: 2861  
APPL No.: 10/604,586 Docket No.: CHEP0025USA

10 Title: THERMAL PRINTER AND METHOD FOR TRANSFERING DYES ON  
MULTIPLE DYE BLOCKS ONTO MEDIA

To: Commissioner for Patent  
P.O. Box 1450  
15 Alexandria, VA 22313-1450

Subject: Information disclosure statement Under  
37C.F.R. §1.56.

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Dear Sir:

This is an Information Disclosure Statement in accordance  
with the duty to disclose information material to patentability  
25 under 37 C.F.R. §1.56. The applicants wish to make of record  
each of the documents listed on the accompanying form PTO/SB/08.  
It is respectfully requested that the Examiner initials each  
of the cited references on the form and that it be made of  
record in the application and that a copy of the initialed  
30 form be sent to the applicants with the next communication  
from the Examiner.

Since the IDS is filed before the mailing date of a first Office action on the merits, consideration of the information disclosure statement is hereby requested according to 37C.F.R. §1.97(b). The prior art patent contained in the information disclosure statement was cited in communications from the Taiwan Intellectual Property Office on Jan. 16, 2004. The applicants sincerely hope that the Examiner can consider each of the items contained in the information disclosure statement.

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According to the requirement set forth in 37C.F.R. §1.98 and M.P.E.P. 609, the applicants are submitting copies of the cited reference (Taiwan Patent No. 283685) and a concise explanation of the relevance in this application hereinafter.

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The purpose of TP No. 283685 is to simplify an ink sheet conveying and to increase the identification information carrying by the ink sheet without increasing the number of sensors by optimizing the locations of the identification marks on the ink sheet and improving the accuracy of detecting the identification marks. In view of Fig. 2, 80 is a sensor block comprising a plurality of sensors, and an ink sheet 40 comprises an identification mark 4g, previous color detector 4h and following color detector 4j. The mark 4g and both the ink colors protruding and extending are read at once. The identification marks of the sheet of a plurality of rows (identification mark 4g and second identification mark 4k) are individually read, and ink sheet information is obtained by the combination of the read results to control a printer.

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Claim 6 of the present invention is repeated below.



6. A thermal printer comprising:

a thermal print head;

a transferring ribbon comprising a plurality of color blocks, each of which comprises at least one dye block;

5 a logic unit capable of performing the following steps:

(a) distributing grayscales of dye blocks in each of a plurality of color blocks to be printed as an image on a medium according to grayscales of the image to be printed on the medium and a predetermined printing rule;

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(b) controlling the print head to transfer the dyes of the dye blocks in the plurality of color blocks to the medium to generate the image according to the distribution in (a); and

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(c) controlling the print head to transfer dyes of an overcoating block of a last color block of the plurality of color blocks to the medium; and

a control circuit capable of controlling operations of the thermal printer.

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Compared with TP No. 283685, the thermal printer disclosed in claim 6 comprises a logic unit capable of distributing grayscales of dye blocks in each of a plurality of color blocks to be printed as an image on a medium according to grayscales of the image to be printed on the medium and a predetermined printing rule, controlling the print head to transfer the dyes of the dye blocks in the plurality of color blocks to the medium to generate the image according to the distribution, and controlling the print head to transfer dyes of an overcoating block of a last color block of the plurality of color blocks to the medium. However, in TP No. 283685, it neither has a means to distribute grayscales of dye blocks according to grayscales

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of the image to be printed on the medium, nor controls the print head to transfer the dyes of the dye blocks in the plurality of color blocks to the medium to generate the image according to the distribution. Therefore, there is nothing about processing of an image to be printed and transferring dyes of the dye blocks in a plurality of color blocks on the ink sheet that is mentioned in TP No. 283685. It is therefore believed that the thermal printer of claim 6 of the present invention is substantially different from the teaching disclosed in TP No. 283685.

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Claims 1 of the present invention is repeated below.

1. A method for a thermal printer, the method comprising:
  - (a) distributing grayscale of dye blocks in each of a plurality of color blocks to be printed as an image on a medium according to grayscale of the image to be printed on the medium and a predetermined printing rule;
  - (b) transferring the dyes of the dye blocks in the plurality of color blocks to the medium to generate the image according to the distribution in (a); and
  - (c) transferring dyes of an overcoating block of a last color block of the plurality of color blocks to the medium;

wherein the thermal printer comprises a transferring ribbon comprising a plurality of color blocks, each of which comprising at least one dye block.

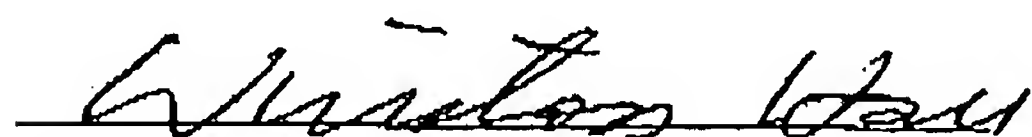
Claim 1 of the present invention is a method claim corresponding to claim 6 of the present invention. The method in step (a) and (b) are not taught in TP No. 283685, either.



Since the prior art patent TP No. 283685 is substantially different from the claim 1 and claim 6 of the present application, and all other claims are dependent on either claim 1 or claim 5 6, the cited art fails to read on any of the claims of the present application.

Respectfully Submitted,

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Date: 3/12/2004

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